A NEW SPECIES OF *CLINIDIUM* KIRBY (COLEOPTERA: CARABIDAE OR RHYSODIDAE) FROM MEXICO, AND DESCRIPTIONS OF THE FEMALES OF TWO NEOTROPICAL MEMBERS OF THE GENUS

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ABSTRACT

Clinidium (Mexiclinidium) reyesi is described from Volcán Tacaná in the Sierra Madre de Chiapas in Chiapas State, southern Mexico. It is intermediate between known species of Subgenus Mexiclinidium and Clinidium (Protainoa) extrarium, so Protainoa is suppressed and C. extrarium is included in Subgenus Mexiclinidium. Females are also described for C. (Mexiclinidium) newtoni Bell and Bell, from the same region, and C. (sensu stricto) mathani Grouvelle, from Brazil.

Systematics

Clinidium (Mexiclinidium) reyesi, new species

Type material.—HOLOTYPE male, labelled "Volcán Tacaná, Talquián, Mpio. Union Juárez, Edo. de Chiapas, alt. 1940 m, 26-VIII-81, P. Reyes, G. Quintero, M.L.Y.C. Castillo." PARATYPES, 2 females, same place and date, one collected by P. Reyes and J. Valenzuela, the other by P. Reyes and G. Quintero. (All specimens in the Museo de Historia Natural de la Ciudad de México.)

Description.—Length 7.0–7.4 mm. Antennae with tufts of minor setae on segments 6–10; basal setae present on segments 8–11; head longer than broad; median lobe relatively long, ending just anterior to posterior margin of compound eye; postorbital, suborbital tubercles absent.

Pronotum relatively short; length/greatest width 1.40; lateral margins curved; apex strongly narrowed; base moderately narrowed; basal impression large, about 0.3 of length of pronotum, open posteriorly; pollinosity continues across anterior margin; inner, outer marginal grooves equally deep, outer one barely visible in dorsal view; angular seta present; precoxal seta absent (Fig. 1).

Intercalary stria ending blindly posteriorly; sutural, parasutural, intercalary, and intratubercular striae deeply impressed, separated by narrow cariniform intervals; female with slight concavity toward apex of intercalary stria (Fig. 2, 3); supramarginal stria (see Bell and Bell, 1985:6) incomplete, not impressed, represented by row of minute punctures; marginal stria effaced in basal 0.25, remainder impressed, becoming deeper toward apex; sutural stria with 1–2 setae near apex; parasutural without setae; intercalary with 1 seta at apex; intratubercular with 2–3 near apex; marginal with about 4 near apex; transverse sulci of abdominal sterna narrowly interrupted at midline, medial end of each sulcus with enlarged pit; sternum VI with 4–8 very large, irregular punctures (Fig. 4); male with indefinite lateral pit on sternum IV, pollinosity of transverse groove extended slightly into

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Fig. 1–7.—Clinidium reyesi new species. 1. Head and pronotum, dorsal view. 2. Elytron, left half, dorsal view, male. 3. Elytron, right half, dorsal view, female. 4. Metasternum and abdomen, ventral view, female. 5. Anterior leg (excluding tarsus), male. 6. Middle leg (excluding tarsus), male. 7. Hind leg (excluding tarsus), male.

Fig. 8–10.—Clinidium newtoni Bell and Bell, female. 8. Metasternum and abdomen, ventral view. 9. Sternum VI, ventral view. 10. Sternum VI, lateral view.

Fig. 11-13.—Clinidium mathani Grouvelle, female. 11. Metasternum and abdomen, ventral view. 12. Sternum VI, ventral view. 13. Sternum VI, lateral view.

pit; female with lateral pit of sternum IV enlarged, transverse groove of sternum IV with pollinosity not extending into pit; anterior trochanter of male without tooth; anterior femur of male with large, sharp tooth; anterior tibia of male with proximal tooth (Fig. 5); female without femoral or proximal tibial tooth; middle

calcar of male acute (Fig. 6); hind calcar falcate (Fig. 7).

This species differs from all previously described species of *Mexiclinidium* in having a tuft of minor hairs on antennal segment 6. This alone will identify it. In our last key to the subgenus (Bell and Bell, 1985), it would be hard to work through the key, since the position of the marginal grooves of the pronotum, used in couplet 1, is intermediate between 1 and 1'. The enlarged pits at the medial ends of the transverse sulci of the abdomen are similar to those of *C. guatema-lenum* Sharp; however the complete strip of pollinosity across the anterior margin of the pronotum, the absence of precoxal setae, and the reduced marginal stria will distinguish the new species.

Clinidium reyesi also resembles C. (Protainoa) extrarium Bell and Bell, 1985. In fact, the latter appears less isolated than when we created the subgenus for it. We hereby synonymize Protainoa and incorporate C. extrarium into Mexiclinidium. Couplet 2 of the key to subgenera (Bell and Bell, 1985:59) should be altered

as follows:

The description of *Mexiclinidium* should be altered to read "antennae with tufts of minor setae on VII–XI or VI–XI."

The key to species should be altered by the insertion of two couplets at the very beginning, as follows:

- 0.1 Antenna with tufts of minor setae on segments VI-XI 0.2

Clinidium (Mexiclinidium) newtoni Bell and Bell 1985

Description of female.—Similar to male, except that calcars are lacking, anterior trochanter and femur not dentate; transverse sulci of abdomen very narrowly interrupted at midline, midline smooth, shining; sulcus of sternum IV forming large glabrous lateral pit (Fig. 8); sternum VI impressed near tip, in some specimens forming small median tubercle (Fig. 9, 10). (In male, sulci slightly more separated, area between finely microsculptured.)

We have studied the following additional specimens of *C. newtoni*: 4 males, 3 females, from Mexico: Chiapas State, Municipio Angel Albino Carzo, Camino al Triunfo, alt. 1410–1880 m, several dates and collectors, April and August, 1983 (all in the Museo de Historia Natural de la Ciudad de México). They vary in

length from 7.0–8.5 mm.

Clinidium (sensu stricto) mathani Grouvelle

Description of female.—Length 7.5 mm. Similar to male in most respects, but without calcars; small lateral pit present on sternum IV, only slightly more developed than in male; very small lateral pit on sternum III (Fig. 11–13).

We have studied one specimen labelled "Brasil: Amapá, Porto Platon, IX-1957, K. Lenko" (The Carnegie Museum of Natural History).

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LITERATURE CITED

Bell, R. T., and J. R. Bell. 1985. Rhysodini of the world. Part IV. Revisions of *Rhyzodiastes* Fairmaire and *Clinidium* Kirby, with new species in other genera. (Coleoptera: Carabidae or Rhysodidae). Quaestiones Entomologicae, 21(1):1–172.